Amendments to the Claims:

Please amend the claims as follows. The following listing of claims replaces all prior versions and listings of claims in this application.

1. (Currently Amended) A method of isolating nucleic acid and protein from each other in a sample, said method comprising:

providing a sample that comprises nucleic acid components and protein components;

contacting the sample with a plurality of magnetic particulate solid supports comprising:

contacting said sample with a first magnetic particulate solid support under conditions wherein nucleic acid components bind to the first magnetic particulate solid supports in a sequence independent manner and the protein components remain substantially intact;

contacting the sample with a second magnetic particulate solid support distinct from the first magnetic particulate solid support, under conditions wherein protein components contained in the sample bind to the second magnetic particulate solid support through a chromatographic interaction and the nucleic acid components remain substantially intact; and

separating the first magnetic particulate solid support to which are bound nucleic acid components and the second magnetic particulate solid supports to which are bound protein components from unbound components in the sample, thereby isolating nucleic acid components and protein components that are substantially intact.

2. (Previously Presented) The method of claim 1, wherein the method comprises providing a sample that contains DNA and RNA components, and further comprises binding both DNA and RNA components to the first magnetic particulate solid support.

3. (Previously Presented) The method of claim 1, wherein the method comprises providing a sample that contains RNA components, and further comprises contacting the sample with a third particulate solid support, wherein the first, second and third particulate solid supports are

distinct, and wherein RNA components bind to the third particulate solid support.

4. (Previously Presented) The method of claim 3, further comprising contacting the sample with the first magnetic particulate solid support and the third particulate solid support in separate steps.

5. (Previously Presented) The method of claim 1, wherein the method comprises isolating nucleic acid and protein components from the same sample.

6. (Previously Presented) The method of claim 1, wherein the method comprises providing a sample containing mRNA.

7. (Previously Presented) The method of claim 1, wherein the method comprises providing a sample containing genomic DNA.

8. (Previously Presented) The method of claim 1, wherein the method comprises isolating total RNA and/or the total DNA from the sample .

9. (Previously Presented) The method of claim 1, wherein the method comprises isolating the total nucleic acid component from the sample .

10. (Previously Presented) The method of claim 1, wherein the method comprises isolating the total protein component from the sample.

11. (Previously Presented) The method of claim 1, further comprising providing a sample selected from a food or allied product, and a clinical, environmental or biological sample.

12. (Previously Presented) The method of claim 1, further comprising subjecting the sample to a preliminary treatment step to free the nucleic acid and/or protein components from structures or entities in which they may be contained.

13. (Previously Presented) The method of claim 1, further comprising providing a sample that comprises one or more cell populations, and subjecting the sample to a cell isolation procedure prior to contacting said sample with said plurality of first and second magnetic particulate solid supports.

14. (Previously Presented) The method of claim 13, further comprising separately isolating one or more particular cell populations from the sample

15. (Currently Amended) The method of claim 1 or claim 13, further comprising subjecting the sample, or a cell population isolated therefrom, to a cell lysis step prior to contacting said sample with said first magnetic solid particulate support., wherein the cell lysis step may be performed in the absence of a chaotropic agent

16. (Previously Presented) The method of claim 15, further comprising subjecting the cell surface proteins of cells within or isolated from said sample to an in vitro modification procedure prior to the cell lysis step.

17. (Previously Presented) The method of claim 1, wherein the sample is not divided at any stage of the method.

18. (Previously Presented) The method of claim 1, further comprising conducting a cell isolation, lysis, or preliminary treatment step conducted prior to contacting the sample with the first magnetic particulate solid support, and dividing the sample after the cell isolation, lysis, and/or preliminary treatment step.

19. (Previously Presented) The method of claim 1, wherein said sample is contacted with said plurality of magnetic particulate solid supports sequentially or simultaneously or in parallel.

20. (Original) The method of claim 19, wherein in a first step DNA is isolated from said sample, in a second step RNA is isolated from said sample and in a third step, protein is isolated from said sample, and wherein said steps may be performed in any order.

21. (Previously Presented) The method of claim 1, further comprising isolating DNA components on the first magnetic particulate solid support selected from supports carrying surface carboxyl or hydroxyl groups, silica or silica-based supports, and supports having a polyamine coated surface.

22. (Previously Presented) The method of claim 1, further comprising binding nucleic acid components from the sample to the plurality of first magnetic particulate solid support in the presence of a detergent.

23. (Previously Presented) The method claim 15, further comprising subjecting the sample to a cell lysis step, wherein cell lysis and nucleic acid binding to the first magnetic particulate solid support occur simultaneously or concomitantly.

24. (Previously Presented) The method of claim 3, further comprising isolating RNA components from the sample using an RNA-specified capture-probe carried by or attached to, or capable of binding to said first magnetic particulate solid support .

25. (Previously Presented) The method of claim 24, wherein said capture probe is or comprises a dT oligonucleotide or dU oligonucleotide.

26.-33. (Canceled)

34. (Previously Presented) The method of claim 1, wherein the first magnetic particulate solid support has a positive or negative surface charge.

35. (Previously Presented) The method of claim 1, further comprising contacting the sample with the first magnetic particulate solid support in the presence of a plurality of solid particles, wherein the plurality of first particulate solid supports and the plurality of solid particles are of different size.

36. (Previously Presented) The method of claim 15 or 23, further comprising lysing the sample in the presence of a plurality of solid particles capable of binding cells, wherein the plurality of solid particles and the first magnetic particulate solid support are of different size.

37. (New) The method of claim 1, wherein the conditions wherein nucleic acid components bind to the first magnetic particulate solid supports in a sequence independent manner and the protein components remain substantially intact and the conditions wherein protein components contained in the sample bind to the second magnetic particulate solid support through a chromatographic interaction and the nucleic acid components remain substantially intact comprise avoiding the use of a chaotropic agent.